



LAHIVE
&
COCKFIELD
L L P

COUNSELLORS AT LAW
28 STATE STREET
BOSTON, MASSACHUSETTS 02109-1784
TELEPHONE (617) 227-7400
FAX (617) 742-4214
www.lahive.com

JOHN A. LAHIVE, JR. (1928-1997)
THOMAS V. SMURZYNSKI
GIULIO A. DeCONTI, JR.
ELIZABETH A. HANLEY
AMY BAKER MANDRAGOURAS
ANTHONY A. LAURENTANO
KEVIN J. CANNING
JANE E. REMILLARD
DeANN FORAN SMITH
DEBRA J. MILASINCIC, Ph.D.
WILLIAM A. SCOFIELD, JR.
SIBLEY P. REPPERT
DAVID R. BURNS
JOHN S. CURRAN
SEAN D. DETWEILER
MEGAN E. WILLIAMS, Ph.D.
LISA DIROCCO TYNER
HATHAWAY P. RUSSELL *
MARIA LACCOTRIPE ZACHARAKIS, Ph.D.

MERIDETH C. ARNOLD
DANIELLE L. HERRITT
EUIHOON LEE **
MANEESH GULATI
CYNTHIA M. SOROS
PETER W. DINI, Ph.D.
MICHAEL J. BASTIAN, Ph.D.
CHRISTOPHER J. McKENNA
VINCENT P. LOCCISANO
JAMES M. MCKENZIE

SENIOR COUNSEL
JAMES E. COCKFIELD

OF COUNSEL
JEREMIAH LYNCH
JEANNE M. DIGIORGIO
CYNTHIA L. KANIK, Ph.D.
JOHN D. LANZA

IFW
PATENT AGENTS
JONATHAN M. SPARKS, Ph.D.
ANDRINA WILLIAMS ZINK
CRISTIN E. HOWLEY, Ph.D.
JILL ANN MELLO, Ph.D.
CHRISTOPHER E. DRABIK
JAMES H. VELEMA

TECHNICAL SPECIALISTS
CATHERINE M. BISHOP
JACOB G. WEINTRAUB
DEBORAH L. NAGLE, Ph.D.
ANNE JACQUELINE WIZEMAN, Ph.D.
BRIAN C. TRINQUE, Ph.D.
CHRISTOPHER R. COWLES, Ph.D.
W. ELANA WANG
CYNTHIA M. GILBERT
MEAGHAN L. RICHMOND, Ph.D.

* Admitted in TX only
** Admitted in CT only

November 5, 2004

MS Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450

Re: U.S. Patent Application No.: 10/783,552
For: *METHOD & APPARATUS FOR IMPROVED MODELING OF CHEMICAL & BIOCHEMICAL REACTIONS*
Inventors: Hicklin, Joseph, *et al.*
Filed: February 20, 2004
Our Ref. No.: MWS-111

Dear Sir:

I enclose herewith for filing in the above-identified application the following:

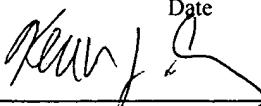
1. Information Disclosure Statement;
2. PTO Form SB/08;
3. Copies of references cited in PTO Form SB/08 (18);
4. A Return Postcard.

No additional costs are believed to be due in connection with the filing of this Information Disclosure Statement. However, please charge any necessary fees in connection with the enclosed statement to our Deposit Order Account No. 12-0080. For this purpose, a duplicate of this sheet is attached.

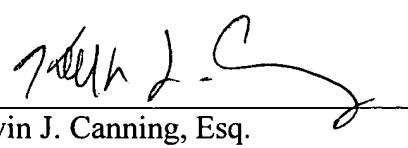
I hereby certify that this correspondence is deposited with the United States Postal Service as first class mail in an envelope addressed to: MS Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450 on:

November 5, 2004

Date

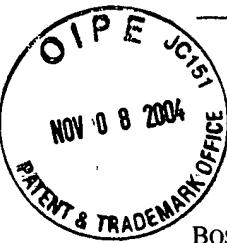

Kevin J. Canning, Esq. Registration No. 35,470

Respectfully submitted,
LAHIVE & COCKFIELD, LLP


Kevin J. Canning, Esq.
Registration No. 35,470
Attorney for Applicants

LAHIVE
&
COCKFIELD
L L P

COUNSELLORS AT LAW
28 STATE STREET
BOSTON, MASSACHUSETTS 02109-1784
TELEPHONE (617) 227-7400
FAX (617) 742-4214
www.lahive.com



JOHN A. LAHIVE, JR. (1928-1997)
THOMAS V. SMURZYNSKI
GIULIO A. DeCONTI, JR.
ELIZABETH A. HANLEY
AMY BAKER MANDRAGOURAS
ANTHONY A. LAURENTANO
KEVIN J. CANNING
JANE E. REMILLARD
DeANN FORAN SMITH
DEBRA J. MILASINIC, Ph.D.
WILLIAM A. SCOFIELD, JR.
SIBLEY P. REPPERT
DAVID R. BURNS
JOHN S. CURRAN
SEAN D. DETWEILER
MEGAN E. WILLIAMS, Ph.D.
LISA DIROCCO TYNER
HATHAWAY P. RUSSELL *
MARIA LACCO TRIPE ZACHARAKIS, Ph.D.

MERIDETH C. ARNOLD
DANIELLE L. HERRITT
EUIHOON LEE **
MANEESH GULATI
CYNTHIA M. SOROS
PETER W. DINI, Ph.D.
MICHAEL J. BASTIAN, Ph.D.
CHRISTOPHER J. MCKENNA
VINCENT P. LOCCISANO
JAMES M. MCKENZIE
SENIOR COUNSEL
JAMES E. COCKFIELD
OF COUNSEL
JEREMIAH LYNCH
JEANNE M. DIGIORGIO
CYNTHIA L. KANIK, Ph.D.
JOHN D. LANZA

PATENT AGENTS
JONATHAN M. SPARKS, Ph.D.
ANDRINA WILLIAMS ZINK
CRISTIN E. HOWLEY, Ph.D.
JILL ANN MELLO, Ph.D.
CHRISTOPHER E. DRABIK
JAMES H. VELEMA

TECHNICAL SPECIALISTS
CATHERINE M. BISHOP
JACOB G. WEINTRAUB
DEBORAH L. NAGLE, Ph.D.
ANNE JACQUELINE WIZEMAN, Ph.D.
BRIAN C. TRINQUE, Ph.D.
CHRISTOPHER R. COWLES, Ph.D.
W. ELANA WANG
CYNTHIA M. GILBERT
MEAGHAN L. RICHMOND, Ph.D.

* Admitted in TX only

** Admitted in CT only

November 5, 2004

MS Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450

COPY

Re: U.S. Patent Application No.: 10/783,552
For: *METHOD & APPARATUS FOR IMPROVED MODELING OF CHEMICAL & BIOCHEMICAL REACTIONS*
Inventors: Hicklin, Joseph, *et al.*
Filed: February 20, 2004
Our Ref. No.: MWS-111

Dear Sir:

I enclose herewith for filing in the above-identified application the following:

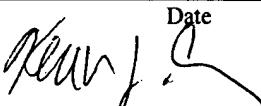
1. Information Disclosure Statement;
2. PTO Form SB/08;
3. Copies of references cited in PTO Form SB/08 (18);
4. A Return Postcard.

No additional costs are believed to be due in connection with the filing of this Information Disclosure Statement. However, please charge any necessary fees in connection with the enclosed statement to our Deposit Order Account No. 12-0080. For this purpose, a duplicate of this sheet is attached.

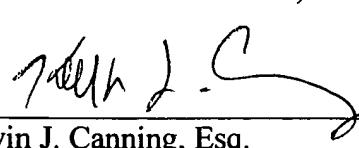
I hereby certify that this correspondence is deposited with the United States Postal Service as first class mail in an envelope addressed to: MS Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450 on:

November 5, 2004

Date


Kevin J. Canning, Esq. Registration No. 35,470

Respectfully submitted,
LAHIVE & COCKFIELD, LLP


Kevin J. Canning, Esq.
Registration No. 35,470
Attorney for Applicants



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the application of: Hicklin, Joseph, *et al.*

Serial No.: 10/783,552

Filed: February 20, 2004

For: *METHOD & APPARATUS FOR IMPROVED
MODELING OF CHEMICAL & BIOCHEMICAL
REACTIONS*

Attorney Docket No.: MWS-111

Group Art Unit: 2673

Examiner: Not Yet Assigned

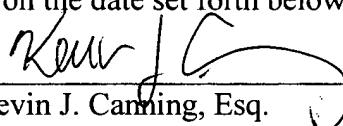
MS Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450

Certificate of First Class Mailing (37 CFR §1.8(a))

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: MS Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450 on the date set forth below.

November 5, 2004
Date of Signature and of Mail Deposit

By:


Kevin J. Camming, Esq.
Registration No. 35,470
Attorney for Applicants

INFORMATION DISCLOSURE STATEMENT

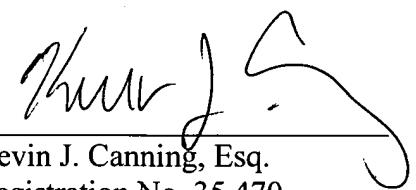
Dear Sir:

Applicants and their Attorney are aware of the following publications and information, listed on the attached PTO Form SB/08, and in accordance with 37 CFR §1.97 hereby submit these publications for the Examiner's consideration. A copy of each cited publication is enclosed. Copies of cited U.S. patents and U.S. publications (Reference ID Nos. A1-A2) are not enclosed with this statement. Copies of foreign patent documents and non-patent literature (Reference ID Nos. A3-A20) are enclosed in accordance with 37 CFR 1.98(a)(2).

This statement is not to be interpreted as a representation that the cited publications are material, that an exhaustive search has been conducted, or that no other relevant information exists. Nor shall the citation of any publication herein be construed *per se* as a representation that such publication is prior art. Moreover, Applicants understand that the Examiner will make an independent evaluation of the cited publications.

Under 37 CFR § 1.97(b)(3), no additional costs are believed to be due in connection with the filing of this disclosure. If, however, a first Office Action on the merits issues in this application bearing a mailing date prior to the date of this Information Disclosure Statement, please charge the appropriate fee as required under 37 CFR §1.17(p) to our Deposit Order Account No. 12-0080.

Respectfully submitted,
LAHIVE & COCKFIELD, LLP



Kevin J. Canning, Esq.
Registration No. 35,470
Attorney for Applicants

28 State Street
Boston, MA 02109
(617) 227-7400

Date: November 5, 2004

TVS/JDL/KJC/les
Enclosures



Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/B/PTO				Complete if Known	
				Application Number	10/783,552
				Filing Date	February 20, 2004
				First Named Inventor	Hicklin, Joseph
				Art Unit	2673
				Examiner Name	Not Yet Assigned
Sheet	1	of	1	Attorney Docket Number	MWS-111

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code ² (if known)			
A1		2003/0009099 A1	01-09-2003	Lett, et al.	
A2		2003/0115032 A1	06-19-2003	Maimon	

FOREIGN PATENT DOCUMENTS					
Examiner Initials*	Cite No. ¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Country Code ³ -Number ⁴ -Kind Code ⁵ (if known)			
A3		CA 2,218,112	10-17-1996	Medical Science Sys. Inc.	
A4		CA 2,307,229	05-14-1999	Entelos, Inc.	
A5		CA 2,311,560	06-03-1999	Entelos, Inc.	
A6		CA 2,311,744	06-03-1999	Entelos, Inc.	
A7		CA 2,361,435 A1	08-10-2000	Physiome Sciences, Inc.	
A8		CA 2,370,283 A1	10-26-2000	Entelos, Inc.	
A9		CA 2,367,463 A1	11-02-2000	Physiome Sciences, inc.	
A10		CA 2,399,272 A1	08-09-2001	Physiome Sciences, Inc.	
A11		CA 2,412,375 A1	12-27-2001	Physiome Sciences, Inc.	
A12		CA 2,414,443 A1	01-17-2002	Physiome Sciences, Inc.	
A13		WO 02/087506 A2	11-07-2002	Entelos, Inc.	
A14		WO 02/097706 A1	12-05-2002	Entelos, Inc.	
A15		WO 02/099736 A1	12-12-2002	Physiome Sciences, Inc.	
A16		WO 03/001891 A2	01-09-2003	Entelos, Inc.	
A17		WO 03/040992 A1	05-15-2003	Gene Network Sciences, Inc.	
A18		WO 03/042857 A1	05-22-2003	Gene Network Sciences, Inc.	

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹Applicant's unique citation designation number (optional). ²See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶Applicant is to place a check mark here if English language Translation is attached.

NON PATENT LITERATURE DOCUMENTS					
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.			
A19		Dialog Search Results, Patent assignee search performed October 10, 2003.			
A20		Taubes, G. The Virtual Cell: Biology and engineering are beginning to cross paths. At their intersection could come remarkable advances in the understanding and treatment of disease. Technology Review. 2002. April, pp. 63-70.			

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹Applicant's unique citation designation number (optional). ²Applicant is to place a check mark here if English language Translation is attached.

Examiner Signature		Date Considered
--------------------	--	-----------------